

## CLAIM AMENDMENTS

1           1. (currently amended) A method of autoclaving a  
2 container in which a shiftable plunger defines a compartment filled  
3 with a fluid, the method comprising the step of:

4           confining the container in a pressurizable chamber;  
5           heating the container in the chamber and thereby changing  
6 a pressure in the compartment of the container;

7           monitoring the pressure inside the container in the  
8 compartment thereof ~~of the container~~ and generating an output  
9 corresponding thereto; and

10          varying pressure in the chamber around outside the  
11 container so as to be generally equal to the monitored pressure  
12 inside the compartment of the container in the compartment thereof.

1           2. (original) The autoclaving method defined in claim 1  
2 wherein the pressure is monitored by monitoring movement of the  
3 plunger as the container is heated.

1           3. (original) The autoclaving method defined in claim 2  
2 wherein the pressure is monitored by a pair of light curtains  
3 flanking the plunger, the pressure in the chamber being increased  
4 when the plunger moves across one of the light curtains and de-  
5 creased when the plunger moves across the other of the light  
6 curtains.

1           4. (original) The autoclaving method defined in claim 2  
2 wherein the pressure is monitored by detecting the distance between  
3 the plunger and a fixed sensor.

1           5. (original) The autoclaving method defined in claim 4  
2 wherein the distance is detected optically or by ultrasound.

1           6. (original) The autoclaving method defined in claim 5  
2 wherein the distance is detected optically by means of reflection  
3 or the Doppler effect.

1           7. (original) The autoclaving method defined in claim 1  
2 wherein the pressure is monitored by providing a pressure sensor  
3 exposed to the fluid in the container.

1           8. (currently amended) An apparatus for autoclaving a  
2 container in which a shiftable plunger defines a compartment filled  
3 with a fluid, the apparatus comprising:

4           a pressurizable chamber in which the container is con-  
5 fined;

6           pump means for pressurizing the chamber;

7           means for heating the container in the chamber and  
8 thereby changing a pressure inside the container in the compartment  
9 thereof ~~of the container~~;

10 means including a sensor for monitoring the pressure  
11 inside the container in the compartment thereof ~~of the container~~  
12 and generating an output corresponding thereto; and

13 control means connected to the sensor and to the pump  
14 means for a varying pressure in the chamber around outside the  
15 container so as to be generally equal to the monitored pressure  
16 inside the container in the compartment thereof ~~of the container~~.

1 9. (original) The autoclaving apparatus defined in  
2 claim 8 wherein the sensor monitors movement of the plunger as the  
3 container is heated.

1 10. (original) The autoclaving apparatus defined in  
2 claim 9 wherein the sensor includes a pair of light curtains  
3 flanking the plunger, the control means increasing pressure in the  
4 chamber when the plunger moves across one of the light curtains and  
5 decreasing it when the plunger moves across the other of the light  
6 curtains.

1 11. (original) The autoclaving apparatus defined in  
2 claim 9 wherein the sensor detects the distance between the plunger  
3 and a fixed sensor.

1           12. (original) The autoclaving apparatus defined in  
2 claim 8 wherein the sensor operates optically or by ultrasound.

1           13. (original) The autoclaving apparatus defined in  
2 claim 12 wherein the sensor operates optically by means of reflec-  
3 tion or the Doppler effect.

1           14. (original) The autoclaving apparatus defined in  
2 claim 8 wherein the sensor is exposed to the fluid in the con-  
3 tainer.

1           15. (original) The autoclaving apparatus defined in  
2 claim 14 wherein the container has a wall and the sensor projects  
3 through the wall.

1           16. (original) The autoclaving apparatus defined in  
2 claim 14 wherein the container is a syringe having a tip cap and  
3 the sensor projects through the tip cap.

1           17. (new) The autoclaving apparatus defined in claim 1  
2 wherein the pressure in the chamber is varied continuously in  
3 accordance with the output.